

TABLE 1 Peak-to-peak headgroup thicknesses h_{pp} , elastic area K_A , K_{app} , and bending k_c moduli for fluid phase bilayers made from phosphatidylcholines

Lipid	h_{pp} (nm)	K_A (mN/m)	K_{app} (mN/m)	k_c (10^{-19} J)
diC13:0	3.41 ± 0.05	239 ± 15	153 ± 13	0.56 ± 0.07
diC14:0	3.52 ± 0.06	234 ± 23	150 ± 14	0.56 ± 0.06
C18:0/1	4.07 ± 0.06	235 ± 14	208 ± 10	0.90 ± 0.06
C18:1/0	—	230 ± 10	207 ± 8	0.92 ± 0.07
diC18:1 _{c9}	3.69 ± 0.04	265 ± 18	237 ± 16	0.85 ± 0.10
diC18:1 _{t9}	—	229 ± 12	208 ± 10	1.03 ± 0.11
diC18:1 _{c6}	—	235 ± 17	209 ± 14	0.90 ± 0.09
C18:0/2	—	241 ± 22	193 ± 17	0.46 ± 0.07
diC18:2	3.49 ± 0.03	247 ± 21	190 ± 18	0.44 ± 0.07
diC18:3	3.43 ± 0.06	244 ± 32	159 ± 19	0.38 ± 0.04
diC20:4	3.44 ± 0.07	250 ± 10	183 ± 8	0.44 ± 0.05
diC22:1	4.37 ± 0.05	263 ± 10	244 ± 8	1.2 ± 0.15

K_{app} are the slopes of tension versus apparent area dilation measured by micropipette pressurization of vesicles in the high-tension regime; K_A are the direct elastic stretch moduli obtained after correction for smoothing of thermal undulations. Peak-to-peak headgroup thicknesses h_{pp} were measured by x-ray diffraction of multibilayers equilibrated at 98% relative humidity. All values are given as mean \pm SD. (Thicknesses h_{pp} for dimyristoyl (diC14:0) and diarachidonoyl (diC20:4) PC bilayers are taken from Petrache et al. (1998b) and McIntosh (1995), respectively.)